Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION

BUILDING and EQUIPMENT

for a

ONE TEACHER SCHOOL



BULLETIN No. 32
HARRISBURG, PENNSYLVANIA, 1927



Illustration 2

QUO VADIS?

(Whither goest thou?)

FOREWORD

Nearly 250,000 children are enrolled at the present time in the 8500 one-teacher schools in the Commonwealth. This school enrollment represents about one-eighth of that of the entire Commonwealth, and one-third of that of all the fourth class districts, and exceed by 34,000 the combined enrollment of the eighteen cities included in the second class districts of the Commonwealth, the entire school enrollment of fifteen states of the United States, and is more than the combined enrollment of five of them. A majority of these one-teacher schools can under favorable conditions be consolidated; but a considerable number of them will, of necessity, be continued for years to come.

Many of the buildings housing these schools were built several generations ago. Compared with the houses and barns of those who built them, the school houses of that time represented marked advancement, and showed a most commendable spirit of community interest.

Most of those pioneer farm buildings, however, have since been replaced by modern houses and barns. Home conveniences for the family and sanitary buildings for the cattle have been provided; yet the same types of school buildings in use seventy-five or one hundred years ago are still much in evdience. The time has come when these buildings and their equipment should receive the attention necessary to bring them up to modern standards of school building construction.

The material in this bulletin has been prepared by Deputy Superintendent Robert C. Shaw, with the collabortation of the members of the Rural Education staff and the following County Superintendents: James F. Chapman, Indiana County; Arthur P. Mylin, Lancaster County; Mervin J. Wertman, Lehigh County and Charles A. Anderson, Jefferson County. This will be helpful in promoting the plans of rural school officials for the progressive improvement of their local schools.

JOHN A. H. KEITH
Superintendent of Public Instruction



Illustration 3. Many children live in country homes like this

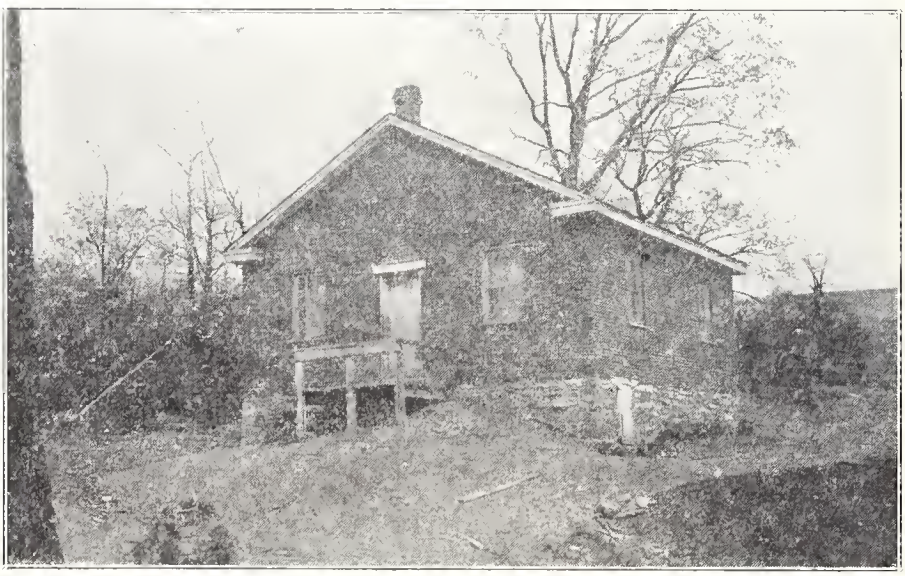


Illustration 4. Often the school they attend is like this

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THE PLANT AND EQUIPMENT OF A ONE-TEACHER SCHOOL

The responsibility for providing suitable grounds, buildings, and equipment for school purposes is placed by the school law, directly upon the board of school directors.

These directors have been elected by the voters of the district not only to reflect the educational attitude and sentiment of those who elected them, but also to represent the childhood of the community and to provide for this childhood educational opportunities equal to those offered by other communities. The rural child of today will find as his co-worker, partner, or competitor of tomorrow one who has had exceptional educational opportunities in some other near or remote district. This has always been true to some extent; but the present use of modern means of travel and intercourse has made community seclusion a thing of the past. Community interests, demands and obligations are no longer local, but general.

The duty of every community is to prepare for the future. It must not assume an attitude of self-satisfaction. A community is not composed of the farms, the houses and the barns within a given area. These may be indicative of the type of the community, but the real community is its citizenship. The community of the next generation is composed of the boys and girls of today. The present generation owes its advantages, its opportunities, its successes, to the fathers who provided the opportunities necessary for progress and development. This debt will be repaid only by giving to the next generation opportunities at least equivalent to those enjoyed by children of other communities. Present opportunities must be sufficient to meet future needs.

As a basis for meeting these needs some detailed requirements are herein set forth.

The essentials requiring serious consideration are:

1. Grounds
2. Buildings
3. Service Systems
4. General Equipment
5. Instructional Equipment

GROUNDS

The School Code contains the following requirements relating to grounds:

The board of school directors of each district shall provide the necessary grounds and suitable buildings to accommodate all the children between the ages of six and twenty-one. (Section 601)

School boards are authorized to acquire suitable sites for school buildings and playgrounds by purchase, lease, gift, devise, agreement, condemnation, or otherwise. This ground may be located in another district if said location is desirable. (Section 602)

No new school building shall hereafter be erected without a proper playground being provided therefor. (Section 604).

The board of school directors in each school district shall put the grounds about every school building in a neat, proper, and sanitary condition, and shall so maintain the same, and shall provide and maintain a proper number of shade trees. (Section 626).

Selection of the Grounds. The school site should be so located as to serve the community to the best possible advantage. Long walking distances should be avoided wherever possible. The most desirable site is one slightly elevated above the road and with gentle slope. A site in close proximity to a railroad, congested public road, shop, stable, or other distracting influence should be avoided.

The amount of land necessary depends upon its usability. No one-room school in the open country should have less than one and one-fourth acres of smooth and reasonably level ground, and two acres or more should be secured wherever possible. The best ratio of width of plot to its length is about two to three. This ground should be dry and reasonably fertile. If the ground is swampy, sub-drains should be made to insure reasonable dryness. If suitable ground cannot be obtained by purchase agreement, the school board may secure such ground by the right of eminent domain. Under this procedure the court will appoint viewers to appraise the value of the land.

Preparation of the Grounds. The grounds should be laid out so as to provide for numerous play activities and games. Swings, see-saws, slides, a giant stride, balance beam, chinning bar, sand box, jumping pit and standards, basket ball, volley ball, and a ball diamond are some of the things worthy of consideration in laying out the ground. Trees should be planted with reference to these activities. Tall trees should not be set nearer than thirty feet to the window side of the building. A grass plot should be maintained between the road and the school building. Shrubs and vines should be planted at proper places about the school house and the outbuildings.

A flag displayed in good weather from a suitable staff is a legal requisite. The old time tall flag-pole with rope and pulley has been found to be dangerous and often out of repair. A flag suspended from a short staff held in a staff holder on the front of the building is safe, economical and attractive.

If road-side fencing is necessary something neat and durable should be provided. Two-inch piping placed in solid posts is suggested.

A concrete, gravel, brick, crushed stone or cinder walk at least four feet wide should extend from the road to the school house, and walks at least two feet wide should extend from the house to the out-buildings. These walks should be kept free from dirt and snow.

A convenient place should be selected where ashes may be emptied, but it should be so secluded as not to mar the beauty of the grounds. A concrete, stone, or brick enclosure will make the ash heap less noticeable.

If the present site, or the present site with the addition of adjacent land, does not lend itself to the development of a playground as indicated in illustration 5, a new site should be selected.

BUILDINGS

Selecting Plans for a New Building. The State Council of Education provides without cost certain standard plans and specifications for one-teacher buildings. The consideration of plans for a new building should include the following:

(a) Additions of one or more rooms at such time as necessity demands.

(b) The size of the building for the proper accommodation of present needs and future possibilities. The number of pupils per teacher in a school of this type should not exceed 35; but 30 is more desirable. A classroom 23 feet wide, 30 feet long with ceiling 12 feet high, with the top of the window glass as near the ceiling as possible, will accommodate this number of pupils and leave some floor space for a library table and a sand table. Other standard sizes are:

22 ft. wide, 28 ft. long, 12 ft. high
23 ft. wide, 30 ft. long, 12½ ft. high

In no case should the width of the room exceed twice the height of the top of the window glass from the floor.

(c) Provision for inside flush toilets whenever possible. They should be entered from the cloak rooms, hall, or vestibule. The installation should be approved by the School Building Bureau of the Department of Public Instruction.

(d) Two suitable cloak rooms. For disciplinary reasons admittance to these rooms should be from the classroom only. They should be at least 5 feet wide and should be well supplied with hooks (one hook for each pupil, which shall be long enough to allow the wraps to hang clear of the wall), and shelves which can be reached easily by the small pupils. A cupboard with shelves should provide storage for dinner pails.

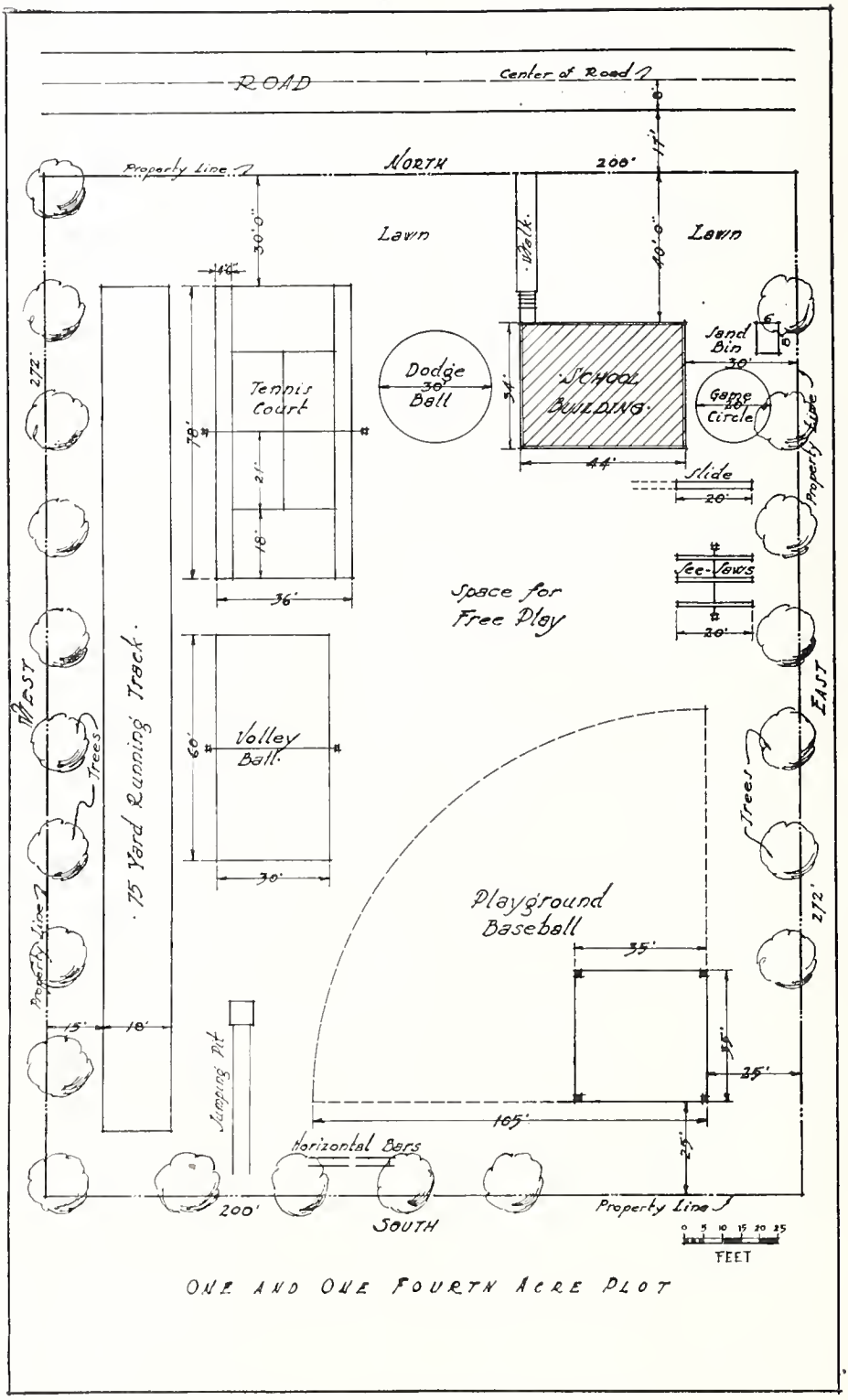
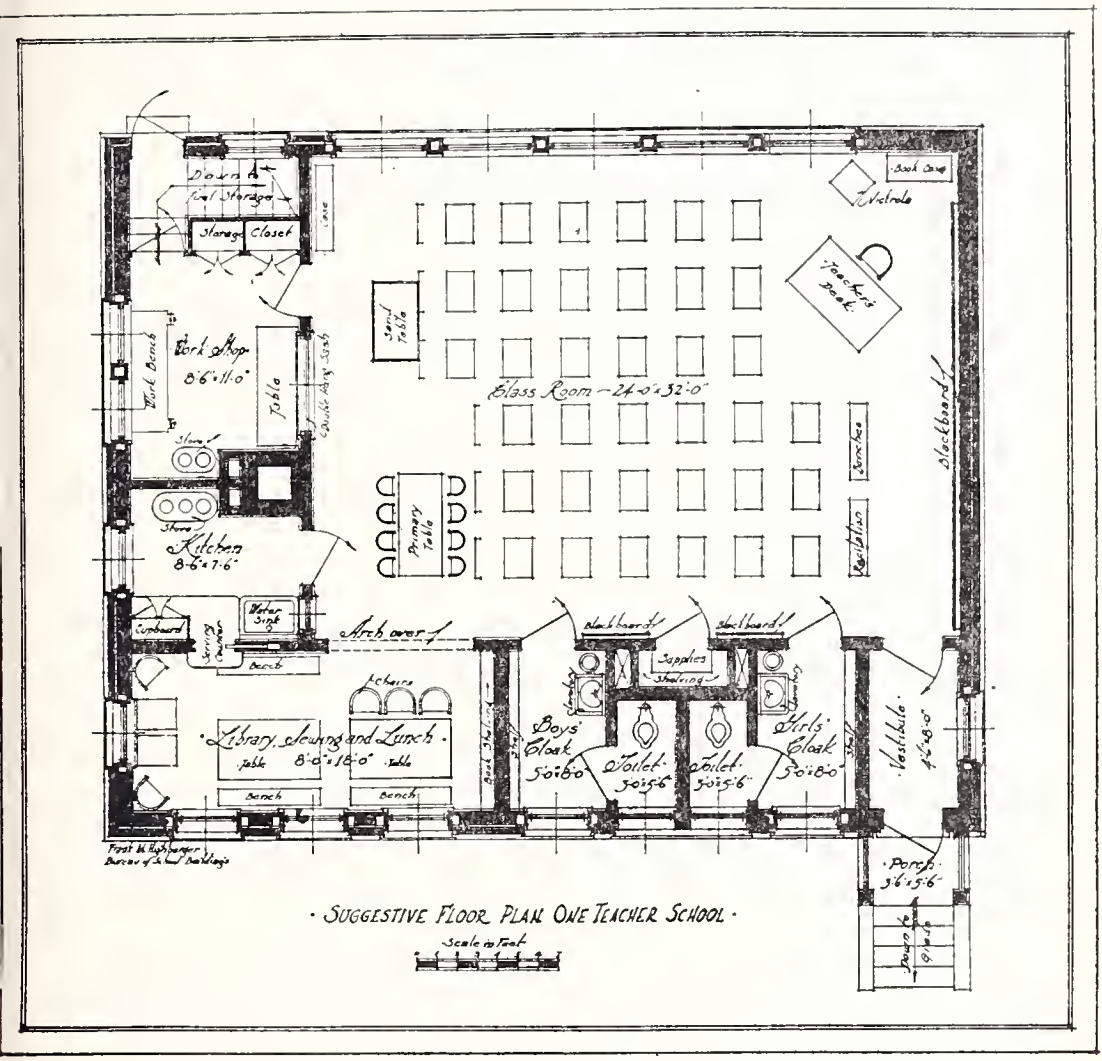


Illustration 5. Suggested playground



· SUGGESTIVE FLOOR PLAN ONE TEACHER SCHOOL ·

Illustration 6. Suggested Floor Plan of One-Teacher School

(e) A storage room for supplies for janitor service and other general equipment.

(f) A room for shop work and one for sewing and cooking. These should be directly accessible from the classroom and separated from it by sufficient window area to give the teacher general oversight of those at work therein.

(g) Provision for a library and its use. Five shelves 3 feet in length with glass doors and lock are essential. A library table, 3 feet by 5 feet, of simple construction, should be located at the rear of the room.

Illustration 6 shows floor plans for a modern building.

The architectural appearance of the building should receive due consideration. It need cost no more to erect a building having a pleasing and refining effect than one which is so severely plain as to be almost repelling in its appearance.

The placement of the building on the site and its interior planning should be such as to give the best lighting possible as well as the best appearance to those passing. Windows should face east or southeast, west or southwest, or south.

The admittance of light should be from the left side of the pupils, though rear and left lighting may be approved if the glass area is one-fourth the floor space. The tops of all windows should be square and the window sills should be at least 3 feet above the floor. The glass should be at least 3 feet 4 inches from the floor. The legal requirement of one-fifth as much window glass area as floor space necessitates measuring the glass area inside the sash. Both upper and lower window sash should be hung on cords with weights. If windows are screened with wire the wire should be attached to frames hung on hinges which permit of opening quickly from the inside should an emergency require it.

The material for the building will depend upon its location and the funds available. Brick or stone should be used wherever conditions warrant. If there is no basement, the foundation should be weather-tight except for small openings which will permit a slow circulation of air to prevent dampness. These openings should be properly screened. Provision for fuel should be made in the basement whenever possible; but this should be accessible by an easy stairway from the vestibule or storage room. If there is no basement a good fuel room should be provided as a part of the building plan. Its floor should be of concrete.

The interior walls and ceiling should be plastered and painted. Bare white walls are injurious to the eyes, cheerless and inartistic, while dark walls and ceilings absorb too much light. Intense, strong colors, or gloss finish paint should never be used for wall decoration. Soft, neutral, flattone colors of the light buff tints are restful to the eyes and afford an unobtrusive and appropriate background for pictures.

The Division of School Health of the Department of Health will send upon request approved color cards for interior walls. These are as follows:

IVORY TINT

CEILING

RICH CREAM

SIDEWALL

LIGHT BROWN

DADO OR WAINSCOTING

The floors should be made of good well-matched material, narrow, and thoroughly dried. Oiling is essential.

Whenever outside buildings, either toilets or fuel house, are required they should be located with reference to convenience as well as appearance. They should be constructed to harmonize in material and finish with the school building.

Remodeling Buildings. Plans for remodeling a school building must be submitted to the State Council of Education. The advisability of remodeling an old building should take into consideration:

(a) The condition of the building. Many are too old and dilapidated to justify the expenditure of money in an attempt to remodel.

(b) The playground area relative to meeting the requirements for play activities. Many old buildings are so located that the grounds are wholly inadequate, and desirable ground is not adjacent. When such conditions exist a new site should be selected and the old building sold or abandoned.

In remodeling an old building where structural conditions warrant, the first consideration is the lighting. Most old buildings have windows on opposite sides. This condition should be changed to unilateral lighting. When it is necessary to increase the glass area and to provide unilateral lighting the tops of the windows should be placed as near the ceiling as possible and the bottom of the glass line should be not less than 40 inches above the finished floor. In cases where it is not possible to secure the required 20 per cent light area on one side, it may be necessary to place additional windows at the rear. It may be necessary to add to the length of the room to provide suitable cloakrooms, library cases, table, and other essentials.

If the old classroom is 26 or 28 feet wide, cloakrooms may be provided along the side, thus bringing the width down to unilateral lighting requirements. (See illustration 7 which suggests plans for remodeling a school building, and illustration 8 which is a picture of a building after being remodeled..

All school buildings should be insured as a protection from fire loss.

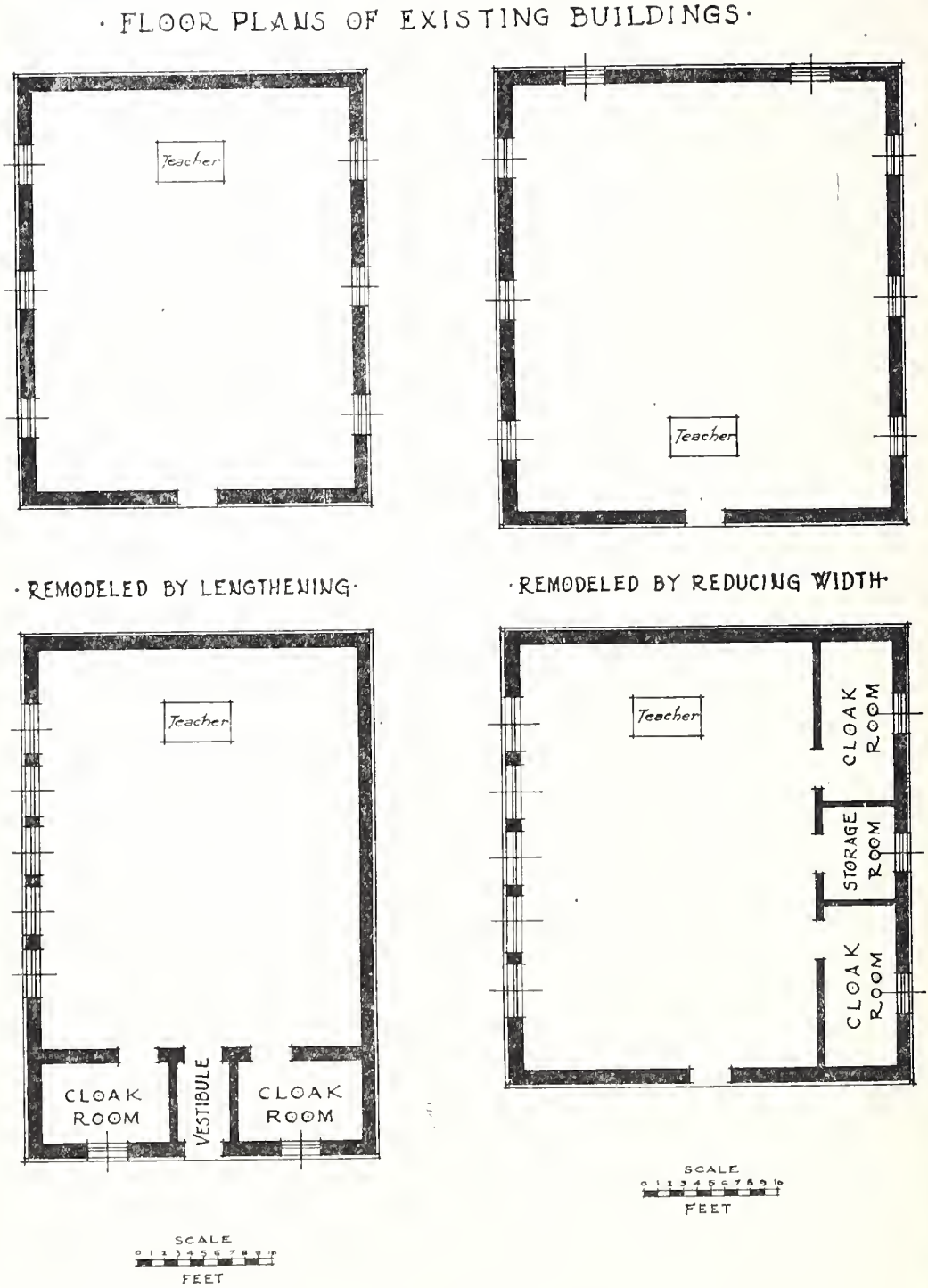


Illustration 7. Suggested Plans of Remodeled Buildings



Illustration 8. A Remodeled Building

SERVICE SYSTEMS

Toilets. The School Code contains the following provisions concerning toilets. "The board of school directors in every district shall, with every building used for school purposes, provide and maintain in a proper manner, a suitable number of water-closets or outhouses, not less than two for each building, where both sexes are in attendance. Such water-closets or outhouses shall be suitably constructed for, and used separately by, the sexes. When any water-closets or outhouses are outside and detached from the school building, the entrance thereto shall be properly screened. (Section 632).

"The board of school directors shall keep all water-closets or outhouses, used in connection with any school building, in a clean and sanitary condition, and shall, not less than ten days prior to the opening of any term of school, and oftener if necessary, have them properly cleaned and disinfected, by the use of dry-slacked lime, or other proper disinfecting material." (Section 633).

"The medical inspector shall, at least once each year, and as early in the school term as possible, make careful examinations of all privies, water-closets, urinals, cellars, the water-supply, and drinking-vessels and utensils, and shall make such additional examinations of the sanitary conditions of the school buildings and grounds as he deems necessary, or as the regulations of the State Department of Health, or the rules of the board of school directors or of the local board of health require. He shall see that the laws of the Commonwealth relating to the health and sanitation of the public schools and the requirements of the local board of health are complied with." (Section 1506).

"It shall be the duty of every county superintendent to inspect the school grounds and school buildings visited by him, and to report to the board of school directors of the proper district any violations of any of the provisions or requirements of this act regarding the sanitary or other conditions thereof." (Section 1124). The same requirements apply to assistant superintendents.

"The Department of Public Instruction shall have the power, and its duty shall be: To condemn as unfit for use, on account of insanitary or other improper conditions, any school building, school site, or outbuilding in this Commonwealth, and, upon failure on the part of the board of school directors to remedy such condition, to withhold and declare forfeited all or any part of the annual appropriation apportioned to any such school district." (Section 2903 k)

Indoor flush toilets are preferable wherever a water supply is available. Installation must guard against freezing.

Two outdoor sanitary toilets are permitted if constructed according to the specifications of the State Department of Health. (See Health Bulletin 54-A). These must be free of markings and carvings. Outdoor toilets may be of the two following types: septic closet, or vault or pit with water-tight sides and earth bottom with lid on back of vault giving easy access for cleaning.

Requirements for Standard School Outhouses.

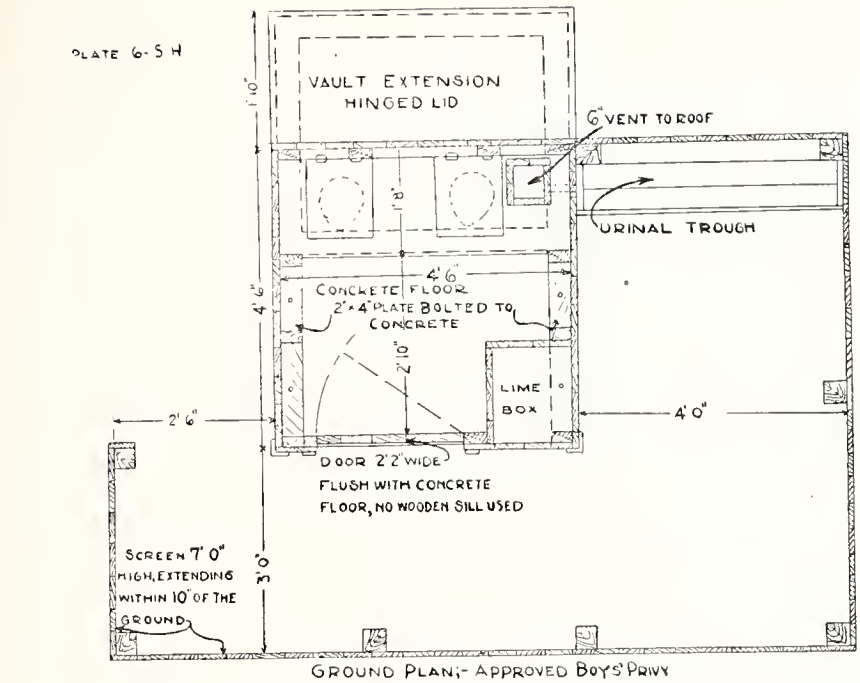
1. Separate outhouses for each sex, 50 feet apart.
2. Concrete outhouse floor and vault. (earth bottom to vault)
3. Seven foot screen, shielding outhouse entrance and boys' urinal.
4. Boys' urinal trough within outside screened enclosure.
5. 6-inch vent shaft (inside dimensions) from vault to roof.
6. Fly proof hinged lids on seats and on rear vault extension.
7. Weekly use of lime over vault contents.

Separate outhouses are required for each sex. They shall (where the ground is at all available) be at least 50 feet apart and a similar distance from the school building, within view from school room windows if possible.

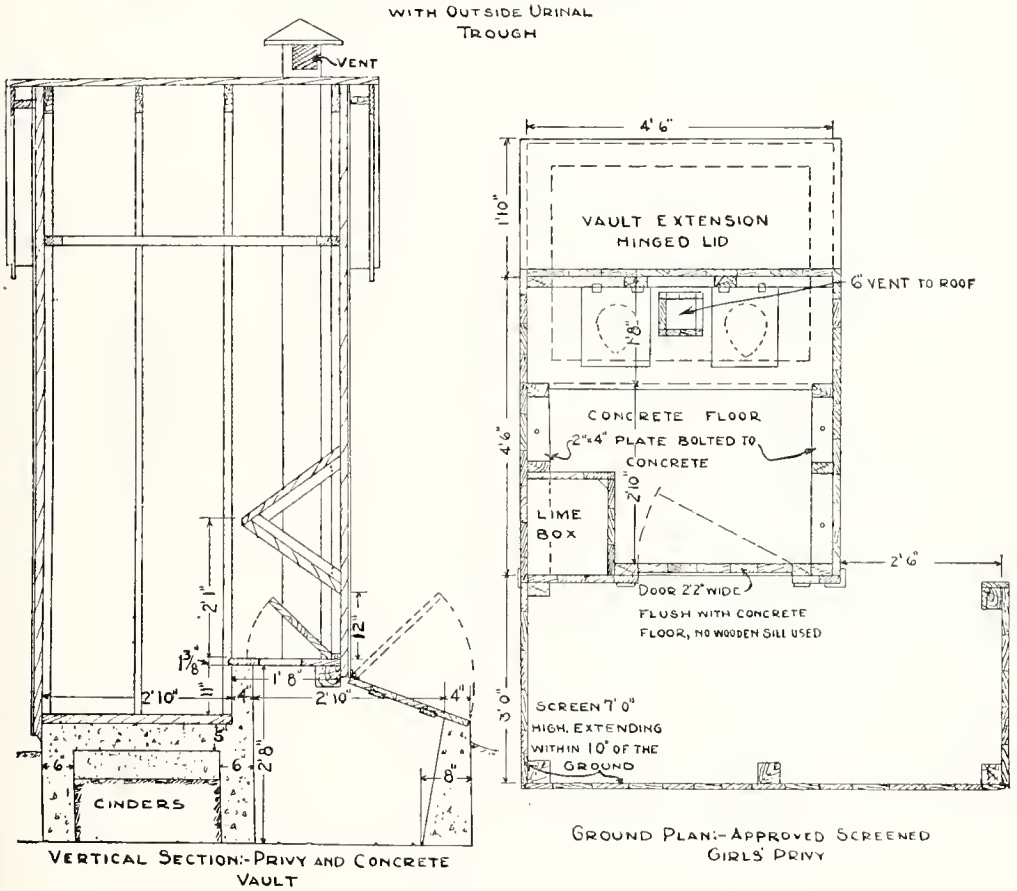
Outhouses should not be placed within 150 feet of any spring or well. If impossible to locate at this distance from a spring or well, the vault in all such cases must be built with water-tight concrete bottom and sides 6 inches thick.

Plans for Outside Toilets

For complete instructions as to location and construction of outside toilets consult with the State Health Department, which furnishes the plans given in illustrations 9, 10, 11.



GROUND PLAN:- APPROVED BOYS' PRIVY WITH OUTSIDE URINAL TROUGH

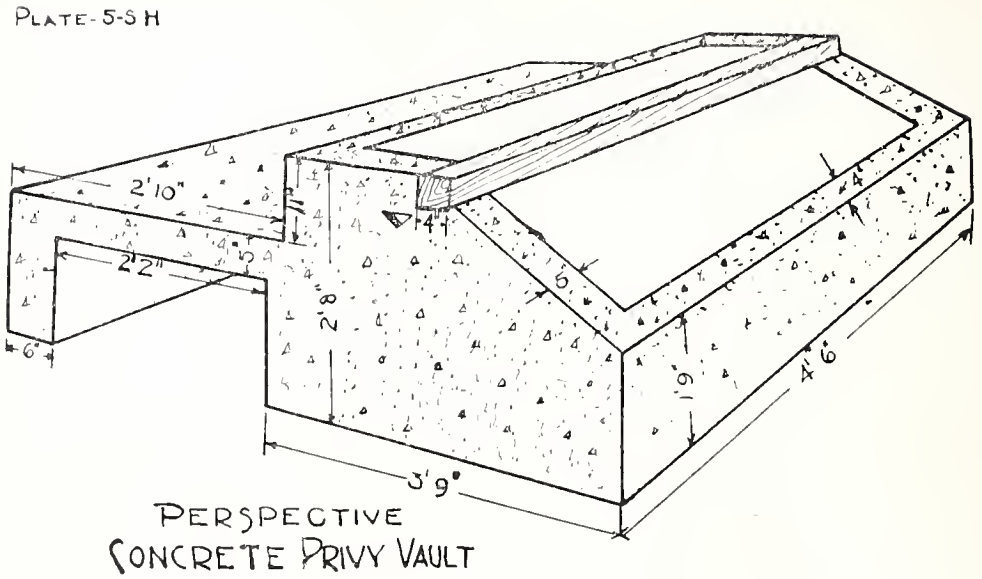


VERTICAL SECTION:- PRIVY AND CONCRETE VAULT

GROUND PLAN:- APPROVED SCREENED GIRLS' PRIVY

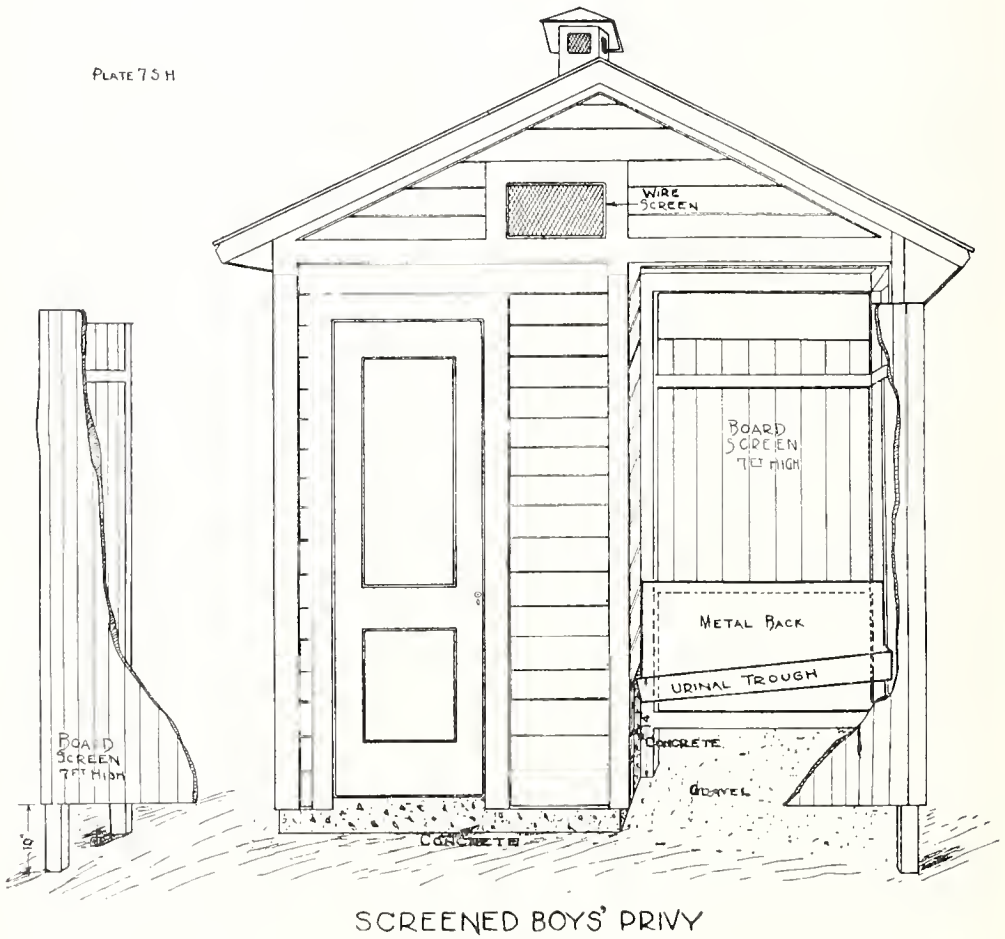
Illustration 10

Illustrations 9 and 10 from Health Department Bulletin
Sanitary School Toilets—Form 54-A



PERSPECTIVE
CONCRETE PRIVY VAULT

Illustration 9



SCREENED BOYS' PRIVY

Illustration 11

Illustration 11 from Health Department Bulletin
Sanitary School Toilets—Form 54-A

Heating and Ventilating Service. The School Code contains the following provisions concerning heating and ventilating systems.

"No board of school directors in this Commonwealth shall use a common heating stove for the purpose of heating any school room, unless such stove is in part enclosed within a shield or jacket made of galvanized iron, or other suitable material, and of sufficient height, and so placed as to protect all pupils while seated at their desks from direct rays of heat." (Section 619)

"No school room or recitation room shall be used in any public school which is not provided with ample means of ventilation, and whose windows, when they are the only means of ventilation, shall not admit of ready adjustment both at the top and bottom, and which does not have some device to protect pupils from currents of cold air.

Every school room or recitation room shall be furnished with a thermometer." (Section 620)

A stove located in the center of the room should not be considered.

If the basement is excavated and all-week janitor service is provided, a basement heating plant may be installed.

Ventilation may be secured by means of window boards, 10 or 12 inches in width, preferably of re-enforced glass, and sloping into the room at an angle of 30 degrees. By raising the sash the air on entering will then come in contact with the warm air and will be diffused throughout the room without producing injurious air currents.

Ventilating heaters placed at one corner of the room are quite satisfactory when properly installed. Teachers need instruction in the care and management of stoves, and ventilating systems.

An accurate thermometer is required in every school room. This should be so protected as to guard against breakage.

Water. Every school should have its own water supply. This should come from either a community water system or from a drilled well on the school property. The well should be at least 150 feet from water closets and other sources of contamination. It should be cased to shut out all surface contamination. A good pump should be installed and kept in good repair, and a concrete basin with drainage for the waste water should be provided. Illustrations 12, 13, 14, show the safeguarding of the water supply.

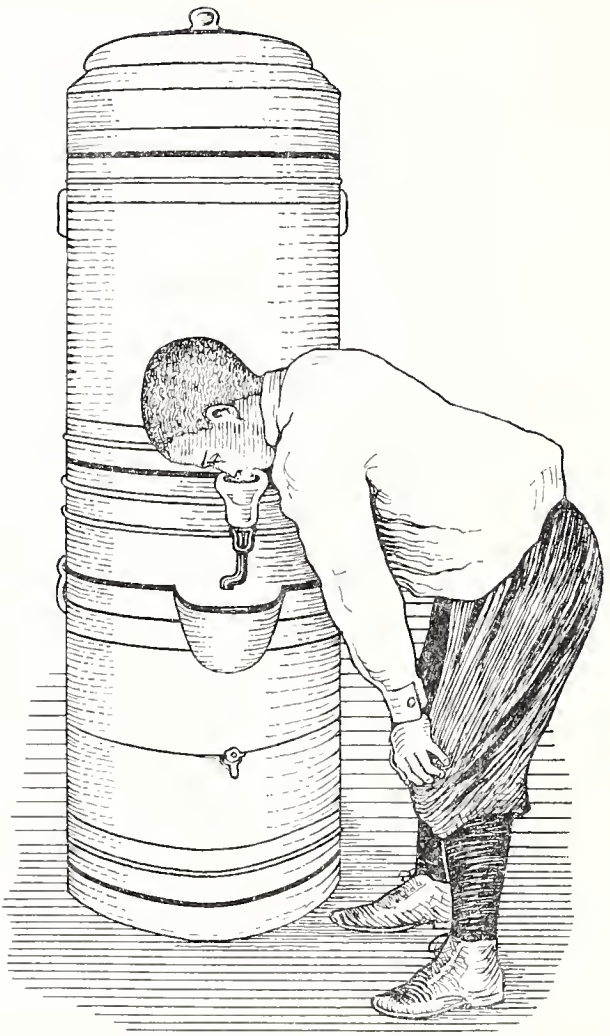


Illustration 12. UNSAFE TYPE OF FOUNTAIN
Covered Water Container with Bubbler Attachment

The type of water container and fountain above shown is generally INSANITARY. Unless this container is always kept filled to capacity there is not enough pressure to throw a good stream or jet and the child cannot drink except by placing his or her lips on the nozzle or bubbler. Even under the best conditions with this type of fountain children will find it more convenient to put their lips right down on the bubbler as the boy is doing in this picture above.

The use of individual paper cups with the common covered container having an ordinary spigot at the bottom is recommended in preference to the container shown above, where no piped water system is available. (From Bulletin 54-B, State Health Department)

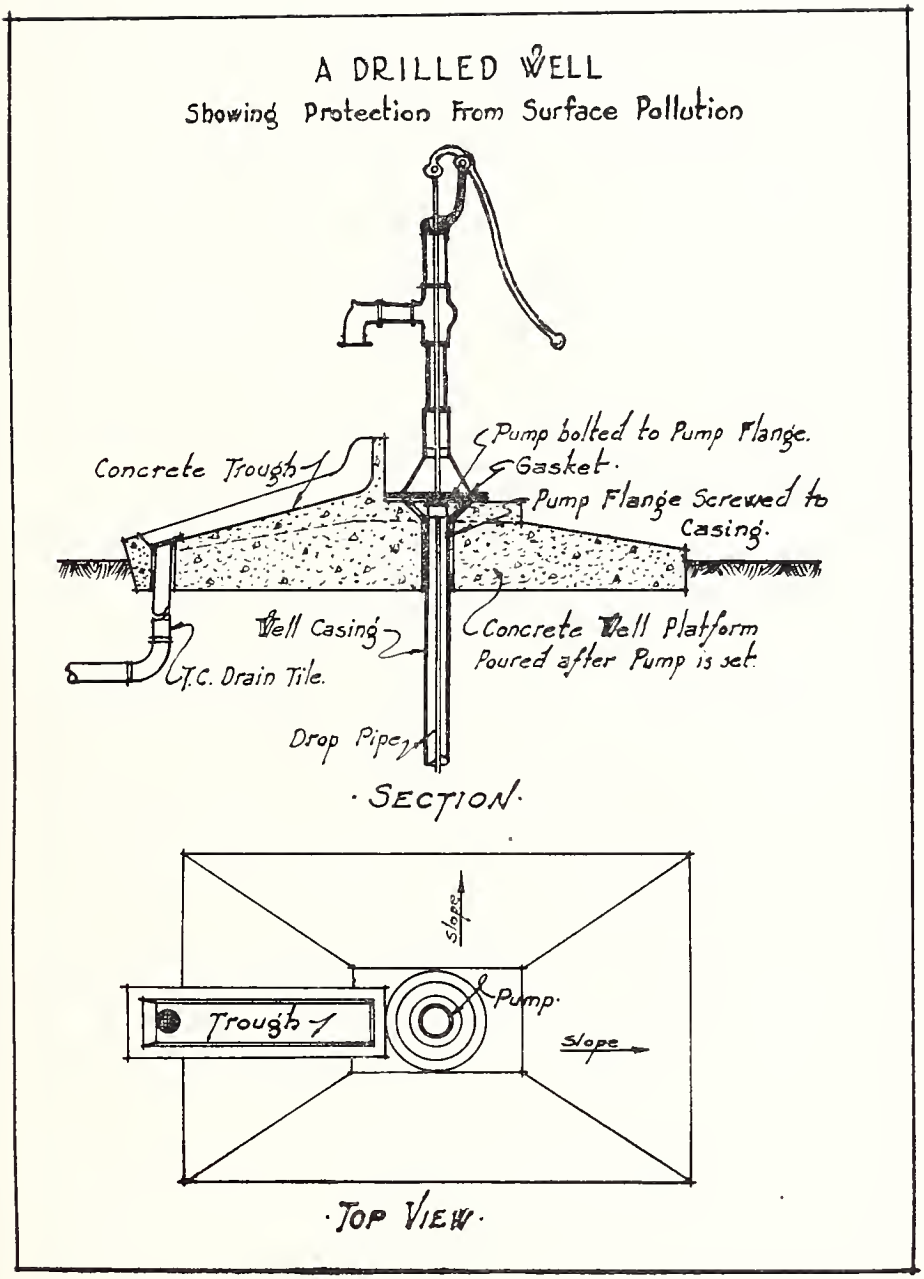


Illustration 13. Plans for well, pump, and drainage as recommended by the State Health Department

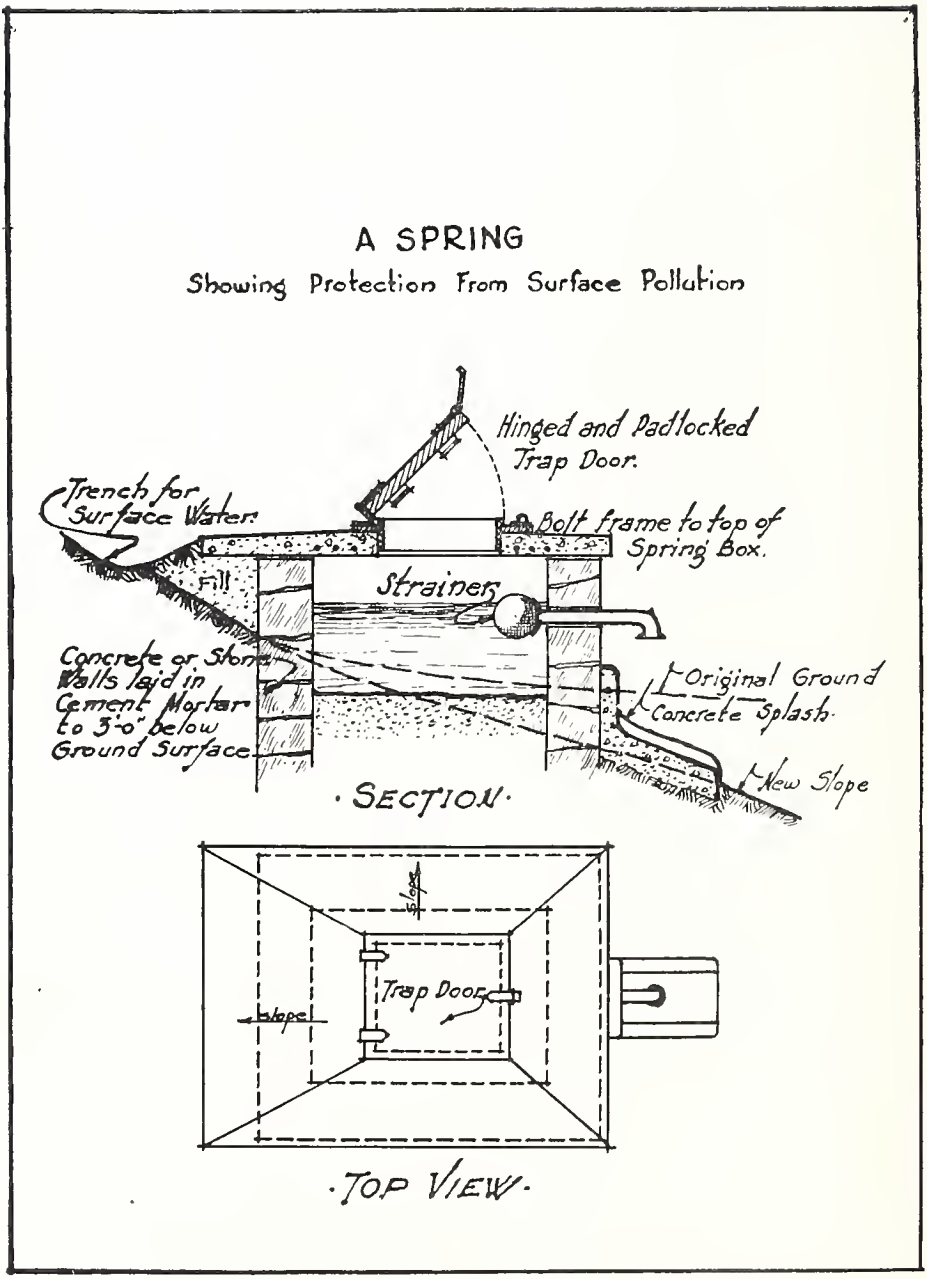


Illustration 14. State Health Department Plans for Protection of Springs

GENERAL EQUIPMENT

Proper seating in a one-teacher school requires serious consideration. Stooped shoulders, contracted chests, curved spines and other physical malformations are frequently due to improper seating in school. Each child should have a seat and a desk adapted to his size. Desks with both adjustable seats and tops are most desirable, especially for the one-teacher school when the size of pupils frequently varies considerably within a few years. If desks with adjustable seats and tops are not possible, the board should provide a sufficient number of different sizes to accommodate all pupils. Six sizes are manufactured as follows:

No. 6 seats are for six and seven year-old children. Grades 1 and 2.

No. 5 seats are for eight and nine year-old children. Grades 2 and 3.

No. 4 seats are for ten and eleven year-old children. Grades 3, 4 and 5.

No. 3 seats are for twelve and thirteen year-old children. Grades 4, 5 and 6.

No. 2 seats are for children fourteen years old and upward. Grades 7 and 8.

(No. 1 seats are too large for elementary school children.)

The front edges of the desks should be placed from the back of the seats as follows:

No. 6 and 5, nine inches.
No. 4, ten inches apart.
No. 3, eleven inches apart.
No. 2, twelve inches apart.

In case of children of unusual size, desks should be placed apart so that when the pupil is sitting erect with back against the back of the seats, the edge of the desk comes within two inches of the body. The smallest seats should be placed in the row nearest the windows and graded in size to the other side of the room.

Illustrations 15 to 21 show faulty and correct seating.

The teacher's desk should have a flat top, drawers with locks, and should have legs long enough to permit sweeping underneath. There should be a good office chair for the teacher and at least three suitable chairs for visitors.

A shelf or desk for an unabridged dictionary is necessary.

Window shades should be of light buff color. They should be hung on double rollers at the center of the window, one to draw up and the other down when necessary. These should be kept in good repair. (See Illustration 22)

Wherever electric current is available, electric fixtures should be installed. When electricity is not available, bracket lamps should be installed.

There should be at least 24 lineal feet of slate blackboard placed at the front of the room and on the side opposite the windows. The height of the board from the floor should accommodate pupils of various ages; slate 4 feet wide with the bottom 26 inches from the floor will meet the needs of a school of this type.

A bulletin board, area 500 square inches, made of soft wood or cork, placed in a prominent position is essential.

If recitation seats are used, they should be placed at the left front side to prevent the injurious light reflection from the blackboards when reading work thereon.

A United States flag not less than three feet in length shall be displayed in every classroom.

Wherever running water is available, an inside lavatory should be installed. Otherwise, a good wash basin should be provided. Paper towels, liquid soap and a mirror are also necessary.

Brooms or floor brushes, a sweeping compound and dust cloths, waste basket, shovel, poker, coal hod (if coal is used), door-mat and footscrapers are janitorial requisites.

A hand fire extinguisher in good condition and a first-aid kit are recommended.



Illustration 15. Desk Too High



Illustration 16. Desk Too Low



Illustration 17. Seat Too Low, Too Far Back



Illustration 18. Seat and Desk Too High



Illustration 19. Comfortable Seat and Well Placed Desk

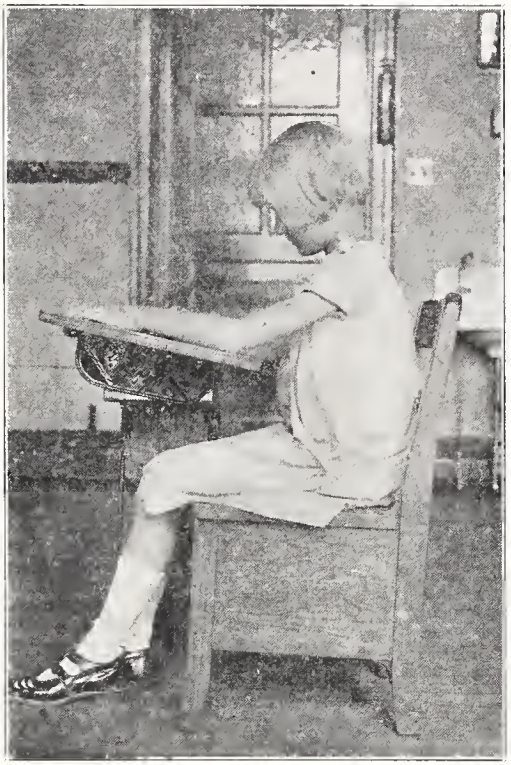
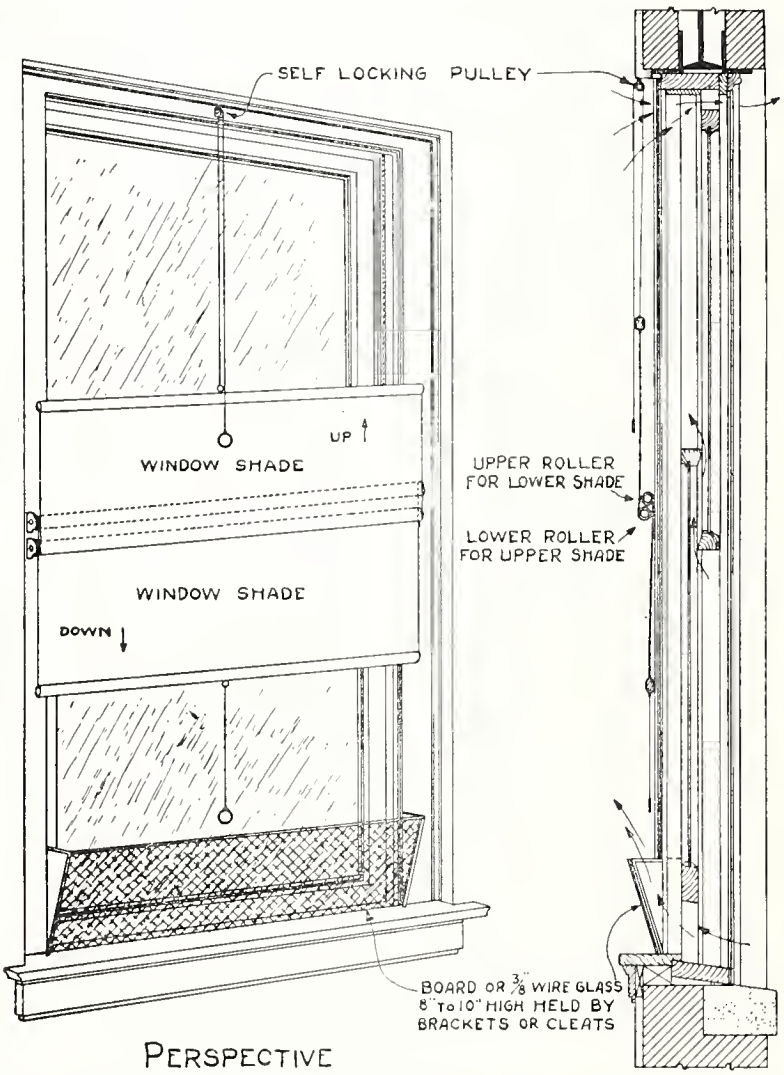


Illustration 20. Movable and Adjustable Seat



Illustration 21. Movable and Adjustable Seat

PLATE 8-SH



PROPER WINDOW VENTILATION SHIELD (BOARD OR WIRE GLASS) ALSO SHOWING ATTACHMENT OF DOUBLE WINDOW SHADES

Illustration 22

INSTRUCTIONAL EQUIPMENT

The School Code contains the following provisions concerning instructional equipment.

"The boards of school directors of each school district in this Commonwealth shall purchase all necessary furniture, equipment, text-books, school supplies, and other appliances for use of the public schools, or any department thereof, in their respective districts, and furnish the same free of cost for use in the schools in said districts, subject to such rules and regulations regarding the use and safe keeping thereof as the boards of school directors may adopt." (Section 702)

Text-books adopted under the provisions of this act by any school district of the second, third, or fourth class, shall be continued in use for a period of not less than five years. (Section 702).

"School supplies shall be divided into two classes. The first class shall include school desks, chairs, typewriters, and school apparatus. The second class shall include maps, globes, and all other supplies, except text-books, necessary for school use, not included in the first class." (Section 760).

The following are essential requirements:

A sufficient supply of modern text-books including music books in good condition to meet the requirements of all pupils; also, a supply of tablets, pencils, pens, ink, a pencil sharpener, crayon, erasers, pointers, drawing paper and eyelet punch. All books and supplies ready for use at the beginning of school.

One unabridged dictionary and sufficient small dictionaries with good print for grades 5, 6, 7 and 8.

Three or more sets supplementary readers for grades 1, 2, 3, and 4; and two or more sets for grades 5 and 6.

A library containing at least 50 carefully selected books suitable for all grades of the school. At least 15 new books should be added each year when the enrollment is less than thirty. For thirty or more pupils, there should be at least 75 books with an annual increase of 20 books. A list of such books may be secured upon application to the Department of Public Instruction.

It is advisable to order library books through the nearest large book dealer. A discount of at least fifteen per cent of the list price is usually allowed.

As the books are meant primarily for home reading and will, therefore, receive hard usage, the larger books and those not obtainable in school editions should be bought in reinforced binding. Books in reinforced binding far outlast those in ordinary publishers' binding and are thus cheaper in the end.

Two thin coats of clear shellac applied with a broad brush will preserve the attractive covers of books and prolong their usefulness. When soiled, the books may be cleaned with a damp cloth.

A record of books belonging to the school should be kept in a blank book.

Ownership imprint should be neatly stamped or written on the title page and on the bottom margin of a page in the body of the book.

Records of books issued to pupils for home reading must be kept if the greatest good to the greatest number of pupils is to be achieved. Cards specially ruled and printed for this purpose may be secured from library supply houses. These cards are 4 x 6 inches in size and have two holes punched at the bottom. A small loose-leaf notebook will answer the same purpose. The author and the title of the book are entered at the top of the card or sheet. On the ruled lines enter the borrower's name and the date when the book should be returned. The grade for which the books is intended is marked in the upper right hand corner of the card.

All the cards are arranged alphabetically by author and are fastened with cords or rings within Manilla board covers, thus serving as a list of the books in the collection as well as the simplest and most efficient kind of charging system.

The books should be issued to the pupils for home reading once a week preferably on Fridays and returned on the following Friday. Time should be allowed for class discussion of the books read. School credit for home reading is a great stimulus to the reading of those books which pupils should read but which may not have a popular appeal.

The school should subscribe for a few suitable magazines for children.

At least four suitable framed wall pictures. (Two, other than portraits)

The following list is suggestive:

Rhine Print No. 22: Ripening Cornfield
Rhine Print No. 11. Oxen Ploughing
(Published by Rudolf Leach, 225 Fifth Avenue, New York)
Emery Print No. 261: The Sewing School, Arts
Emery Print No. 278: Primary School in Brittany
Emery Print No. 132: The Torn Hat, Sully
Emery Print No. 522: Lincoln, Borglum
(Published by Brown-Robertson Company, 415 Madison Avenue, New York)
Elson Print No. 161: George Washington
Elson Print No. 191H: Abraham Lincoln
(Published by the Elson Art Publication Company, School Street, Belmont, Mass.)

U. S. Print No. 579: A Holiday, Potthast
U. S. Print No. 590: The Whistling Boy, Duveneck
U. S. Print No. 584: Nature's Melody, Tellander
U. S. Print No. 582: In the Garden, Brush
U. S. Print No. 638: The Pioneers, Amick
U. S. Print No. 632: Phantom Canyon, Amick
(Published by the United States Printing and Lithographing Co., 6 east 39th St., New York City)

A twelve inch globe suspended from the ceiling.

A collection of good up-to-date maps including county, state, United States, North America, Asia, South America, Africa. (For county maps address Department of Highways, Harrisburg, or United States Post-Office Department, Washington, D. C. Various kinds of state maps may be secured from the State Department of Forests and Waters, Department of Highways or Public Service Commission; also, from the United States Geographical Survey and the United States Department of Agriculture, Bureau of Soils, Washington, D. C.)

For grades one and two. Sand table, ruled and plain paper, scissors, crayons, water colors, modeling materials, stereoscopes and views, rulers, paste and paste brushes, pegs, perforated cards, stencils, pins, colored yarns, colored paper, foot rule, toy money, perception cards, word and sentence builders, printing outfit, number cards, also teacher's manual, and cards for reading course.

For grades three, four, five and six. Yard stick, twenty-five foot or sixteen and one-half foot tape-line, pint and quart measure (liquid), quart and peck measure (dry), clock dial, suggestive books, catalogues and advertising cut book for scrap books, pocket envelopes for selected clippings, material for writing, folding, mailing, receiving and filing letters.

For grades seven and eight. Duplicating device and materials; arithmetical blocks and charts, compass, small microscope, collection of woods, minerals, grains, plants, leaves, etc., that may be found locally; check books, promissory note books, receipt books.

Musical instruments, such as piano, reed organ, or phonograph and records. (Other instruments may be used with these) Suitable music books. The following list of records is suggested:

1. Battle Hymn of the Republic
2. America the Beautiful
3. Old Folks at Home
4. Stars and Stripes Forever
5. Open the Gates of the Temple
6. Kentucky Home
7. Beethoven's Minuet
8. Hallelujah Chorus

9. Onward, Christian Soldiers
10. Quartette form Rigoletto
11. Sextette from Lucia
12. Carry Me Back to Old Virginia
13. Volga Boatsong
14. Largo from "New World Symphony"
15. Rubinstein's Melody in F
16. Swing Low, Sweet Chariot
17. William Tell
18. Traumerei
19. Barcarolle from "Tales of Hoffman"
20. Humoresque (Dvorak)

A minimum hot lunch equipment should be provided and kept in a neat box or cupboard. (See Illustration 23)



Illustration 23. Hot Lunch Service in a One-Teacher School

SCORE CARD FOR ONE-TEACHER SCHOOLS

The one-teacher school buildings and equipment have been rated upon the basis of the score card shown in illustration 24 and 24A. A certificate of evaluation as shown in the facsimile copy, illustration 25, has been granted to every one-teacher school. This completes a systematic survey of the building and equipment needs, and teachers, directors, and citizens will find this rating useful in determining improvements necessary to bring a school up to accepted standards. Many rural communities have already adopted progressive building programs as a result of the survey and the certificate.

SCORE CARD FOR ONE TEACHER SCHOOLS
Material Equipment

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
Field Service Bureau, Harrisburg

County _____ No. _____ District _____ No. _____ School _____ No. _____

Teacher _____ Scorer _____ Date _____ 192____

The scoring must be done personally by the County or District Superintendent or by an Assistant Superintendent. Cards arranged by districts should be filed semi-monthly with the Department of Public Instruction.

The scoring is to be completed before the close of the current school term. The maximum score is given after each item. Write your score at the right using units and tenths only. Where specific limits are not given, scores between the maximum and 0 should represent proportionate values or estimates.

		U	T
I. GROUNDS (10 points)			
A. Adaptability (4 points)			
1. Reasonably level and smooth	1		
2. Dry (soil fertile, previous)	1		
3 Clean (no weeds, rubbish, refuse)	1		
4. Walks to road and out-buildings (concrete, stone, cinder)	1		
B. Size (4 points)			
1. One acre or more	4		
2. Or three-fourths acre	1		
3. Less than one-half acre	0		
C. Ornamentation (2 points)			
1. Trees, shrubs (placed with reference to buildings and play activities)	1		
2. Flag and staff in good condition (legal requirement)	1		
TOTAL	10		
II. BUILDINGS (30 points)			
A. Exterior (10 points)			
1. Foundation (brick, stone or concrete, weather tight)	1		
2. Roof (slate, shingles, metal; good condition)	2		
3. Doors open out (legal requirement)	1		
4. Walls; good repair; if wood, good siding	2		
5. Paint (wood and metal work well painted)	2		
6. Porch or vestibule	1		
7. Fuel house or storage (good repair and convenient)	1		
B. Interior (20 points)			
1. Walls and ceiling in good repair	1		
2. Floor: good repair; oiled, or sweeping compound used	1		
3. Door knobs, locks, window fasteners, (good repair)	1		
4. Two cloak rooms, properly lighted and ventilated	2		
5. Hooks well placed for all wraps, shelves for lunch boxes	1		
6. Closed shelves or cases for books and supplies	2		
7. Walls and ceiling light in color	2		
8. Glass area at least 20 per cent of floor space	4		
9. Less than 14 per cent of floor space	0		
10. Lighting from left side only	4		
11. Or lighting from left and rear only	3		
12. Or lighting from opposite sides, check ( ); no score	0		
13. Shades, translucent and workable (cords attached)	2		
14. If dark shades, check ( ); no score	0		
TOTAL	30		
III. EQUIPMENT (32 points)			
A. General (12 points)			
1. Single seats for all pupils	2		
2. Seats unmarked, good condition	1		
3. Seats properly placed and adjusted for all pupils	3		
4. Three good chairs	1		
5. Suitable teacher's desk with drawers and locks	1		
6. Twenty-four lineal feet of slate or good composition blackboard	2		
7. Blackboard well placed with reference to height and light	2		

Illustration 24

		U	T
B. Instructional (20 points)			
1. Adequate supply of good textbooks including music books	4		
2. Two sets of supplementary readers for each of first four grades	3		
3. Primary material furnished by district (pereeption and number cards, word and sentence builders, sand tables, scissors, colored crayon paper and paste)	2		
4. Supplies (good paper, pencils and sharpener, pens, ink)	2		
5. Four suitable pictures, framed (two other than portraits)	1		
6. Globe: modern maps (physical or political, good repair); county, state, U. S., world continents	2		
7. Library, fifty books approved as suitable by scorer	3		
8. Or thirty books approved as above	1		
9. Less than twenty-five books	0		
10. Unabridged dictionary and sufficient number of others	1		
11. Classroom flag (legal requirement)	1		
12. Musical instrument (organ, piano or phonograph and suitable records)	1		
TOTAL	32		
IV. SERVICE SYSTEMS (28 points)			
A. Heat (4 points)			
1. Basement furnace with fresh air duct	3		
2. Or ventilating room heater (good repair)	3		
3. Or jacketed stove (legal requirement)	2		
4. Thermometer (legal requirement)	1		

		U	T
B. Ventilation (3 points)			
1. Approved foul and fresh air system (good repair)	3		
2. Or window ventilators (all window sash movable)	2		
C. Water (6 points)			
1. Sanitary (protected from surface drainage; sufficient distance from stables, toilets, cess pools, etc., to prevent seepage)	4		
2. Piped from distance	2		
3. Or pump appliances in good order or spring on ground	2		
4 Or near-by neighbor's supply	1		
D. Water Service (5 points) (see Health Bulletin 54B)			
1. Bubblers (attached to supply pipe)	3		
2. Or covered container with faucet (good condition, frequently cleaned, provision for waste water)	1		
3. And paper cups with cup dispenser in daily use (p. 3, Health Bulletin 54B)	2		
4. Wash basin, liquid or powdered soap, individual sanitary towels	2		
E. Toilets (10 points) (see Health Bulletin 54A)			
1. Location	1		
2. Properly constructed including screen and urinal (meet Dept. of Health requirements)	4		
3. Unmarked	2		
4. Clean; paper supply	2		
5. General repair and paint	1		
6. Outside (check ( ); no score)			
7. Chemical (check ( ); no score)			
TOTAL	28		

Illustration 24a

Commonwealth of Pennsylvania,

Department of Public Instruction

CERTIFICATE OF EVALUATION

_____ School

_____ School District _____ County

19____

It is hereby certified that this school plant has been given a rating of ____ on a basis of one hundred points distributed as follows:

Divisions	Possible Score	Allotted Score
Grounds	10	—
Buildings	30	—
Equipment	32	—
Service Systems	28	—
Total	100	—

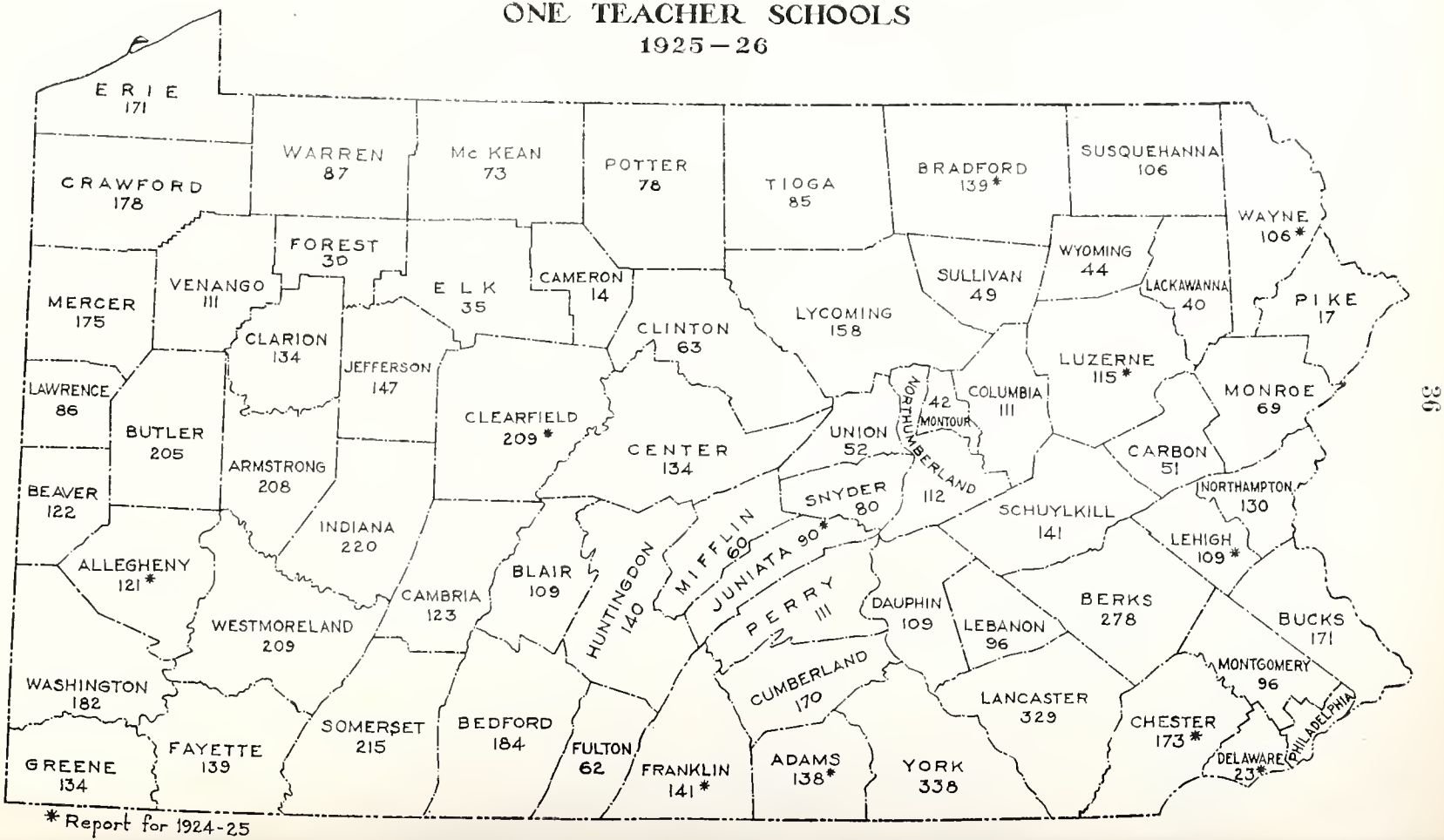
_____ County Superintendent

_____ Superintendent of Public Instruction

BASIS OF SCORE

Illustration 25

NUMBER
OF
ONE TEACHER SCHOOLS
1925—26



* Report for 1924-25